

REMARKS

Claims 8, 10-27, 35-48, 50-81, 83-93, 95, 99-112, 121-128, and 130-132 are pending in the subject application, of which claims 36, 67, 79, 80, 92, 93, 100, and 130 are independent.¹ Favorable reconsideration and further examination are respectfully requested.

Claim rejections under 35 U.S.C. § 112

Claims 96-98, 113-120, and 129 were rejected under 35 U.S.C. § 112 as failing to comply with the enablement requirement. Without conceding the appropriateness of the rejection, we have canceled claims 96-98, 113-120, and 129.

Claim rejections under 35 U.S.C. § 103

Claims 17, 36, 53, 67-69, 74, 78-81, 87, 91-94, 100, 102, 110, 11, 121, and 130 were rejected under 35 U.S.C. § 103(a) as being unpatentable over WO 98/09460 (Ziv) in view of U.S. Patent No. 7,035,636 (Lim).

Claim 36 is shown below.

36. A method comprising,
enabling many-to-many communication among radio network controllers and radio nodes through a packet network,
establishing a first session for a first access terminal on a first radio network controller through a first radio node, wherein the first session is established when the first access terminal is dormant, and
maintaining the first session on the first radio network controller as the first access terminal moves from a coverage area of the first radio node to any portion of a coverage area of a second radio node through which a second access terminal has a second session on a second radio network controller, wherein the first session is maintained when the first access terminal is dormant;

¹ The Examiner is urged to independently verify this recitation of the pending claims.

wherein when the first access terminal is dormant, the first access terminal has the first session established on the first radio network controller and does not have any traffic channel established with any radio network controller; and

wherein when the second access terminal is dormant, the second access terminal has the second session established on the second radio network controller and does not have any traffic channel established with any radio network controller.

The applied art is not understood to disclose or to suggest at least the underlined portions of claim 36 above.

In this regard, the Examiner concedes that Ziv fails to disclose establishing a first session for a first access terminal on a first radio network controller through a first radio node, where the first session is established when the first access terminal is dormant. In an attempt to remedy these deficiencies of Ziv, the Examiner relied upon Lim. The Applicant respectfully submits that no reasonable combination of Ziv and Lim describe or suggest the features of claim 36. This is because the claim is directed to dormant access terminals, whereas Ziv is not, as explained below.

As shown in Figure 2 of Ziv (reproduced below), Ziv discloses using “a simple packet router” as an CDMA interconnect subsystem 26 to support connections between base station controllers and base stations transceiver subsystems.²

² Ziv, pg. 6, lines 5-13 (“Because it is a simple packet router, CDMA interconnect subsystem 26 does not add great expense or complexity to the system.”); Fig. 2.

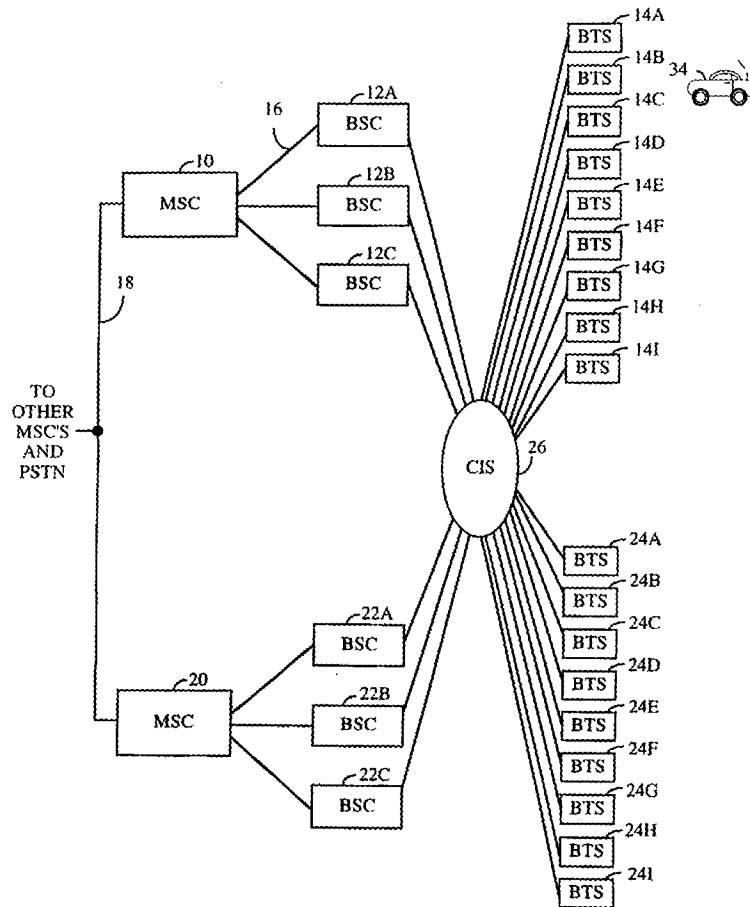


FIG. 2

The central focus of Ziv, however, is on call connections made between a remote unit, a base station, a base station controller, a mobile switching center (MSC), and a public switched telephone network (PSTN).³ In this regard, Ziv states:

...Telephone calls are routed by base station transceiver subsystems 14A - 14I between remote unit 34 and base station controllers (BSC) 12A - 12C of systems 30. Telephone calls may also be routed by base station transceiver subsystems 24A - 24I between remote unit 34 and base station controllers 22A - 22C of system 32 . . . Once a call has been established, it occupies a signal path from the PSTN through a mobile switching center and base station controller to at least one base station transceiver subsystem. The signal path may change during

³ Id., p. 3, lines 18-22, 26-30; p. 4, lines 12-15, 30-33; p. 5, lines 13-15; p. 6, lines 20-24.

the call if the call is handed off between base station transceiver subsystems due to the movement of the remote unit within the system.

Ziv further states:

. . . Assume a call is established between unit remote unit 34 and a landline connected to the PSTN . . . Mobile switching center 10 also provides a connection from the PSTN to base station controller 12A. Base station controller 12A receives the PSTN format signaling from mobile switching center 10 and encodes it into packets for transmission over the wireless link . . . Note that the number of calls that can be handled by base station transceiver subsystems 14A - 14C is limited to the number of calls that can be handled by base station controller 12A . . . Note what happens in the configuration of FIG. 2 if connection 16 fails. A call connection can be established, using IS-634 protocol, from the PSTN to MSC 10 to base station controller 12B through CDMA interconnect subsystem 26 and to BTS 14B . . .⁴

Ziv therefore discloses what happens when a radio network controller [the base station controller of Ziv]⁵ fails⁶ and when a radio network controller is over capacity.⁷ As explained above, Ziv is concerned with routing *connected calls*, and does not disclose or suggest *dormant* access terminals, as claimed. In particular, Ziv does not disclose or suggest establishing a first session for a first access terminal on a first radio network controller through a first radio node, when the first access terminal is a dormant access terminal, on a first radio network controller through a first radio node, wherein the first session is established when the first access terminal is dormant.

Furthermore, we contend that there is no disclosure or suggestion to combine Lim and Ziv in the manner suggested (i.e., “in order to make handoff [*sic*] process more efficient”⁸). In this regard, as shown in figure 2 of Lim (reproduced below), Lim is understood to disclose

⁴ Id.

⁵ Applicants remarks dated November 2, 2007, at pg. 26, indicated “agreement with the examiner as to the correspondence between terms in the claims and terms in Ziv, that is, ‘BTS’ corresponds to a ‘radio node,’ ‘BSC’ corresponds to a ‘radio network controller,’ and ‘CIS’ is a ‘packet network.’”

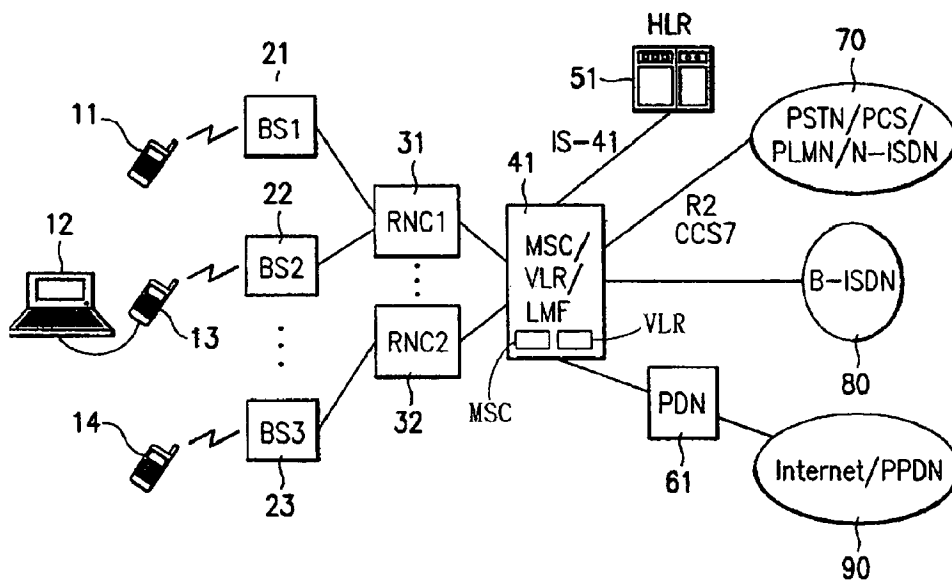
⁶ Ziv, pg. 6, lines 20-30.

⁷ Id., pg. 6, line 31 to p. 7, line 2.

⁸ Office Action, page 5.

controlling packet data service as an active terminal moves from an area of an old radio network controller to an area of a new radio network controller.

FIG.2



By maintaining the same medium access control (MAC) state information between the new radio network controller and the terminal, Lim purports to allow an access terminal to rapidly resume packet data service upon switching to a new RNC. In this regard, Lim states:

if a packet data service active terminal, for example, active terminal 13 moves from the pre-connected old RNC 31 to the new RNC 32 while either in the suspended state or the dormant state, MAC state information must be transferred to the new RNC 32 so that a MAC state of the terminal can become the same as that of the old RNC 31 . . .⁹

. . . when a packet data service active terminal moves from an area of a first radio network controller to an area of a second, new radio network controller under the condition that it is at either a suspended state or a dormant state, the

⁹ Lim, col. 6, lines 13-19.

same medium access control (MAC) state information and the same radio resource control information are provided between the new radio network controller and terminal, so that the packet data service can rapidly be resumed on the basis of an initially established point-to-point protocol link.¹⁰

Thus, as shown in figure 2, Lim is understood to disclose techniques for increasing the efficiency of handoffs within what Ziv characterizes as a “typical wireless system” topology.¹¹

We submit that Lim cannot reasonably be combined with Ziv because the RAN topology disclosed in Lim is contrary to the very teachings of Ziv. The network architecture in Ziv is offered as an alternative to traditional radio area network topologies, such as the topology disclosed in Lim. In describing the problems associated with traditional RAN topologies, Ziv refers to a “typical wireless system,”¹² an example of which is shown in figure 1 of Ziv (reproduced below).

¹⁰ Id., col. 2, lines 31-43.

¹¹ Ziv, page 2, line 39. “FIG. 1 illustrates [sic] block diagram of a typical wireless system.”

¹² Id.

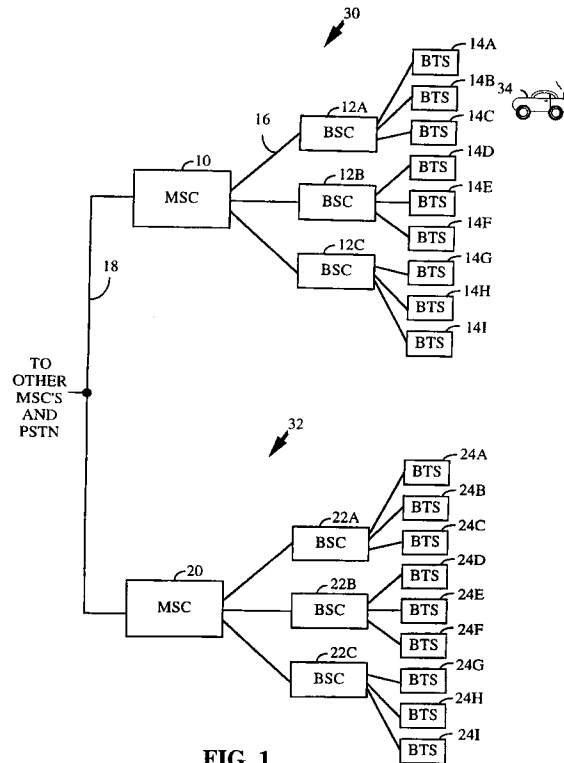


FIG. 1
PRIOR ART

Referencing the figure above, Ziv states:

The problem with the configuration shown in FIG. 1 is the resultant close coupling of coverage and capacity. Note that the number of calls can be handled by base station transceiver subsystems 14A-14C is limited to the number of calls that can be handled by base station controller 12A . . . If some event occurs which increases the traffic within the area serviced by base station controller 12A above the reasonable number of expected connections, the additional connections cannot be supported.¹³

Referencing the same figure, Ziv discusses further problems with traditional RAN topologies, stating:

Also problem [*sic*] occurs when one of the IS-634 link connections or one of the base station controllers fails. For example, if connection 16 in FIG. 1 becomes disabled, base station controller 12A no longer receives signals and no remote

¹³ Id., page 5, lines 13-24.

unit within the coverage area of base station transceiver subsystems 14A-14C can receive or place a call and all existing calls are disconnected.¹⁴

Thus, as Ziv is directed to a RAN topology that is meant to be an alternative to the very topology disclosed in Lim, combining Lim with Ziv would destroy the intended purpose of the topology both described and claimed in Ziv. In this regard, on at least one occasion, the Board of Patent Appeals and Interferences has held:

However, there is nothing in the disclosures of [primary reference] Young and [secondary reference] Haslacher that would teach the Examiner's proposed combination or any reason for making it. In fact, the proposed combination would destroy the Young apparatus for its intended purpose.¹⁵

For at least the foregoing reasons, we submit that combining Ziv with Lim is improper as a matter of law.

Accordingly, for at least the foregoing reasons, claim 36 is believed to be patentable over the applied art.

Independent claims 67, 79, 80, 92, 93, 100, and 130 contain features that are similar to those described above with regard to claim 36, and are believed to be patentable for at least similar reasons as claim 36. For example, the independent claims include the following features that are similar to the features recited in claim 36:

67. . . . wherein when the first access terminal is dormant, the first access terminal has the first session established on the first radio network controller and does not have any traffic channel established with any radio network controller . . .

79. . . . wherein when the first access terminal is dormant, the first access terminal has the first session established on the first radio network controller and does not have any traffic channel established with any radio network controller . . .

¹⁴ Id., page 5, lines 25-30.

¹⁵ *Ex parte Sternau*, 155 U.S.P.Q. 733, 735 (Bd. of Appeals 1967).

80. . . . wherein when the access terminal is dormant, the access terminal has the session established on the radio network controller and does not have any traffic channel established with any radio network controller . . .

92. . . . wherein when the first access terminal is dormant, the first access terminal has the first session established on the first radio network controller and does not have any traffic channel established with any radio network controller . .

93. . . . wherein the first session is established and the first session is maintained when the access terminal is dormant . . .

100. . . . wherein when the first access terminal is dormant, the first access terminal has the first session established on the first radio network controller and does not have any traffic channel established with any radio network controller . .

130. . . . wherein when the first access terminal is dormant, the first access terminal has the first session established on the first radio network controller and does not have any traffic channel established with any radio network controller . .

Dependent claims are believed to define patentable features. Each dependent claim partakes in the novelty of its corresponding independent claim and, as such, the dependent claims have not been discussed specifically herein.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Applicant : Vedat Eyuboglu et al.
Serial No. : 09/891,103
Filed : June 25, 2001
Page : 40 of 40

Attorney's Docket No.: 12144-0007001

We believe the application is in condition for allowance, which action is respectfully requested.

Please apply any charges or credits to Deposit Account No. 06-1050, referencing attorney docket no. 12144-0007001.

Respectfully submitted,

July 29, 2009
Date: _____

/Paul Pysher/

Paul A. Pysher
Reg. No. 40,780

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (877) 769-7945

22185920.doc